## 

5 October 1955

Room 2035 "I" Bldg. - 1400 hours

# I. Old Business:

1. Review and Approval of the Minutes of Meeting #48.

## II. New Business:

- Proposal for Investigating Properties of the Cubical Quad Antenna.
- 2. Redevelopment of RS-13 (SPOUT).
- 3. PEAK-1 and Automatic Morse Machine (with reusable tape) Keyers.

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25 YEAR RE-REVIEW

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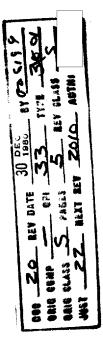
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#### MINUTES

Research, Development and Production Review Board

I. Meeting #48 of the Research, Development and Production Review Board was held in the OC Conference Room at 1430 hours on 7 September 1955. The following persons were in attendance:

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II. Under Agenda Item I, Old Business:

The Minutes of Meeting #47 were reviewed and approved by the Board.

III. Under Agenda Item I, Old Business:

1. The Engineering representative reported the following significant changes in projects' status:

AS-2: Project now nearing completion. Receiving portion of system will be ready for test in mid-September. Approximately 3 weeks will be required for laboratory tests and 1 week for a laboratory field test. OC-O&T will be asked to participate in the field test.

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Multicoupler: The investigation of the multicoupler has been completed and the final report has been compiled. The major source of trouble was the low frequency filter which rejects signals from high powered broadcast stations. One each of these filters has been sent to and the Laboratory is now in the process of making 4 more. Engineering is presently obtaining other multicouplers and/or data on such multicouplers for additional evaluation.

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High Frequency Converter: Circuit designs have been started for a small HF converter for use in \_\_\_\_\_ This converter will operate over a range of 3-6 mc. The unit will be battery powered and is to operate into the front end of a broadcast receiver which is tuned to a frequency of \_\_\_\_\_ The converter will have two pre-set crystal

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control frequencies.

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CP-4: The objectionable acoustical noise has been eliminated by the use of hermetically scaled relays. The reduction of bias on the keying tubes has improved the keying qualities of the unit and has also enabled the unit to be operated on a line voltage as low as 70 volts. A report which recommends modifications which are to be undertaken by the field is now in progress. After some discussion, it was the opinion of the Board that no further procurement of CP-4 units be made until further study and discussion as to the utility of these units is completed. The O&T Division is to contact various areas and obtain their opinion on the advisability of continuing use of the CP-4 and of modifying CP-4 units to remove objectionable features.

OC-O&T ACTION

RBR-13: Three sets of this terminal equipment have been recently completed. The Laboratory is now in the process of working on a peak clipping filter which will reduce the ringing of the narrow band mark-space separating filter when high peaks of noise are applied to it.

A&A	PROJECTS	:

25X1		Portaphone: Evaluation and report were
25X1		Hand Generator: Evaluation completed; report now in progress.
25X1		VLF Receiver: Evaluation now in progress.
25 <b>X</b> 1		Mark 301 Receiver: Evaluation now in progress.
25X1 25X1	OC-O&T ACTION	KW-1: Evaluation now in progress. Operations Division indicated they desired to ship one of these units to for use and field testing. Engineering representative raised the question as to the availability primary power at the station to operate this equipment. The O&T Division agreed to investigate the situation.
25X1		51J4 Receiver: Effects of high impedence front end are now being determined.  EXTERNAL PROJECTS:
25X1	ſ	County 1 William Code - Dames I was been worstend
25X1		from and Logistics is now in the process of
25X1		writing the contract. When draft of contract has been approved by contracting officer, will be given an oral go ahead signal so that work may start before the actual signing of the document.

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25X1 25X1		Project Logistics has requested a formal proposal from  It would be very difficult to write an outline so that
25X1		could do this work instead of Also, work on quadricode is even being held up because of work on at
25X1	OC-E & DD/CO	It was agreed that the Chairman and the Engineer- ing representative would discuss this matter with D/CO looking
25X1	ACTION	toward eliminating as a prospective contractor.
: !5X1.		RS-ll/A: Delivery is expected on 15 September.
.07(1		TSS is perturbed about the price which was quoted for our 3 mile range sets and is attempting to have reduce 25X1
:	oc-e &	its estimate. The Chairman indicated that he had approved the write- up made by the Engineering Division for D/CO's information support
:	OC-0&T ACTION	of the Board's decision to request TSS to go forward with the proposal. Upon receipt of this information the O&T Division will
ŀ		prepare a letter to TSS requesting that they proceed with the project.
25X1 25X1 25X1		A complete system consisting of all base units and a field unit was delivered to where it was set up in bread board fashion in the maintenance shop at for demonstration and instructional.
1 1 8		purposes. The system performs quite satisfactory. Considerable interest was evidenced by all those who saw it.
		Marine Crystal Video Set: Progress is continuing at a satisfactory
25X1		rate.
:		Operational field test was scheduled for September 6; however, the pilot was on annual leave during that week. Tentative schedule of test is now September 13.
25X1	•	URC-4 - UHF Drop Zone Antenna: has now started work on this.
5X1		Voice Secrecy System: has made a demonstration of this system
i i		working over a 3 mile telephone link while using a relatively simple coder which demonstrated only the principles involved in the system.
25X1		The coder was not of sufficient complexity to give good security.  is now working on the final report. The system is to be trans-
		ferred to NSA who is mainly interested in the efficacy of filters which have been developed to compensate for the peculiar frequency response characteristics of telephone transmission lines.
÷		RS-11/AABB: Work is progressing satisfactorily and components are now being subjected to JAN tests. Delivery of the prototype of the 3-12
		mc range set is expected by late December or early January with the 12-30 mc tuner to follow in about 2 months. A new informal proposal
, , , , , , , , , , , , , , , , , , ,		was requested which would incorporate both tuners in one case. The figure of \$30,000 has been quoted for two such units.
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25X1	RT-1 Modification: The contractor has completed work. The units have been shipped to It is expected they will arrive by mid-September.	
25X1 25X1 25X1 25X1 25X1	Project Short range (10 miles) field tests have been made between the transmitting station and the laboratory in Los Angeles to iron out any obvious defects which may exist in the equipment. The receiving portion of the equipment is to be shipped to pn 12 September. Negotiations with are now underway to use certain facilities in their for the long distance test of this system. representatives have indicated that they have a 231D standby transmitter which CIA may use for the test in return for the installation of a class A rhombic antenna oriented toward the United States. Funds for the erection of the antenna will be supplied by CIA.	25X1 25X1 25X1

Under Agenda Item I, Old Business:

1. Review of R&D Expenditures for F.Y. 1955.

- a. Considerable discussion took place on this item. The Budget Officer and the Engineering representative supplied information to the other members of the Board as to the funding of R&D programs. It was agreed that this write-up in effect was not actually "expenditures" but "obligations" of funds during fiscal year 1955.
- b. It was agreed that after the R&D budget has been submitted for the succeeding fiscal year, and if it becomes necessary to reduce the requested amounts, the R&D Board will make recommendations to the D/CO as to which items should be cut.
- c. In the discussion of the item spent for Consulting Services from \_\_\_\_\_\_ the Chief Engineer indicated that during the current fiscal year this service is not being obtained on a retainer basis but funds are spent only when actual work is performed.
- V. Under Agenda Item II, New Business:

IV.

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A very brief discussion was had as to the matter of priorities on quick reaction projects at the laboratory. It was pointed out that up to the present the Chief of R&D has been able to accept crash SPD projects and turn out the work without seriously interferring with any existing projects. However, it appears that in the near future the situation may attain where both SPD and Ops projects

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may be of a crash nature and a conflict in scheduling will result. It was pointed out to the Board that since these projects are of a crash nature it is not feasible to wait for a regular Board meeting and some method should be devised for assigning relative priorities to such projects. It was further established that these priorities must be established at a sufficiently high level since a determination must be made as to the operational priority for the projects.

VI. The meeting adjourned at 1645 hours. The next meeting of the Ideas and Requirements Panel will be held on 21 September and the next regular meeting of the Board will be held on 5 October.

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### Distribution:

Members and those in attendance listed in Paragraph I R&D Internal Projects R&D External Projects